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It will be observed that the casing B'' described hereinabove is easily dismountable, the cable sections C''(i) and C''(i+1) each being able to abut at their end remote from the casing either with an adapter of a neighboring casing, or with a connector terminating a module 40 such as represented in Figure 3, comprising several casings linked in series.

In a variant embodiment not represented in the figures, it is also possible to overmold the assembly which can then no longer be dismounted but whose robustness is increased through said overmolding.

It is thus apparent that the system according to the invention makes it possible:

- to make substantial manufacturing savings by at most halving the number of connectors employed between the modules,
- to make the system reliable by reducing the number of connections,
 - to standardize the format of the components of the system and thus to facilitate their handling,
 - to facilitate the handling of the system by virtue of the miniaturization of the casings and the integration into the body of the casings of the load take-up means,
 - simply and rapidly to deploy "clusters" consisting of casings mounted in series, it being possible for example for said clusters to be wound around a reel by virtue of the reduced volume of the casings.

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CLAIMS

- 1. A module (40) for acquiring geophysical signals, comprising:
 - at least one casing (B''(i), B''), which houses processing means including means for digitizing the signals, each casing being associated with a track (T(i)),
 - and two cable sections (C''(i)) each comprising:
- at a first end, a connector (30) suitable for being coupled up to a complementary connector,
 - at a second end, an adapter (140a, 140b) designed to be fixed to a casing (B'', B''(i)) and to effect an electrical link with the processing means housed in the casing,

the main body of each casing being materialized by two adapters (140a, 140b) and a cover (170), the adapters and the cover being fixed together in a nonremovable manner so that the casing does not comprise any connector for coupling to other casings.

- 2. The module (40) as claimed in claim 1, characterized in that it comprises at least two casings (B''(i), B''), linked in series by cable segments (C''(i+1)) each of which comprises at its two ends an adapter (140a, 140b) designed to be fixed to a casing and to effect an electrical link with the processing means housed in the casing.
- 3. The module (40) as claimed in claim 1 or 2, characterized in that each casing (B'') comprises a rigid member (150) fixed on one face of the respective adapters (140a, 140b) secured to the respective cable sections or segments, so as to take up a sizeable part of the tensile loads

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exerted between these two cable sections or segments.

- 4. The module as claimed in claim 3, characterized in that each casing (B'') comprises means (143, 143a, 143b) for attaching the adapters of the cables to the rigid member (150).
- 5. The module as claimed in claim 4, characterized in 10 that the means for attachment are rigid lugs (143, 143a, 143b), a part of which is embedded in the adapter, another part of each lug projecting from the adapter toward the rigid member (150) engaged in a respective orifice (153) of the rigid 15 member along а direction substantially perpendicular to the direction of the part of the cable sections or segments which is adjacent to the casing (B'').
- 20 6. The module as claimed in one of the preceding claims, characterized in that processing means integrated into the cable adapters comprise spark arresters.
- 25 7. The module as claimed in one of claims 3 to 6, characterized in that the rigid member carries means for processing electrical signals.
- 8. The module as claimed in one of the preceding claims, characterized in that each casing comprises leaktightness means (1100, 1101a, 1101b).
- 9. The module as claimed in one of claims 5 or 6 taken in combination with claim 8, characterized in that the leaktightness means comprise a seal